

WHAT IS CLAIMED IS:

1. An accounting system including a plurality of host computers, an accounting server connected to said plurality of host computers, a storage control device connected to said plurality of host computers and said accounting server and having a plurality of channel ports for performing data input/output operation, and storage devices connected to said storage control device for storing data inputted/outputted to/from said plurality of host computers, comprising:

accounting data generating means for generating accounting data containing at least one of number of times of access and a data transfer quantity for every accounting subject control unit; and

transfer means for informing said accounting server of said accounting data generated by said accounting data generating means.

2. An accounting system according to Claim 1, wherein each of said accounting subject control units includes at least one of a host computer, a World Wide Name, a channel port, a storage device and an in-storage-device area.

3. An accounting system according to Claim 1, wherein said storage control device is associated with a service processor and includes transfer means for informing said service processor of said accounting data.

4. An accounting system according to Claim 3,

further comprising:

means for setting an upper limit value of said accounting data in said control unit for each said accounting subjects, said means being made to operate from at least one of said accounting server and said service processor.

5. An accounting system according to Claim 4, wherein said upper limit value is determined on the basis of a predetermined period which includes, as a unit, at least one of a day, a week, a month, and a year.

6. An accounting system according to Claim 4, wherein said storage control device includes means which operates so that when a data input/output request issued from one of said host computers is larger than said upper limit value, said means does not accept said data input/output request larger than said upper limit value.

7. An accounting system according to Claim 4, wherein, to said accounting subject control unit in which said upper limit value has not been set yet, meter accounting is made based on at least one of said number of times of access and said data transfer quantity.

8. An accounting system according to Claim 4, wherein accounting for said accounting subject control unit in which said upper limit value has been set is made based on fixed accounting.

9. An accounting system according to Claim 7, wherein at least one of said accounting server and said service processor has means for fetching said accounting data of said storage control device every predetermined period, and means for calculating rates on the basis of said accounting data fetched by said fetching means and for performing rate management.

10. An accounting system according to Claim 1, wherein connection between said storage control device and said host computers is made through serial channels of optical fibers so as to constitute a LAN.

11. An accounting system according to Claim 1, wherein said storage control device has I/O control portions for setting at least said upper limit values and generating accounting data in accordance with said upper limit values, and a shared memory for storing said accounting data.

12. An accounting method for making accounting for operation of a plurality of host computers in a storage-related accounting system which is constituted by said plurality of host computers, an accounting server, a storage control device connected at least to said plurality of host computers and to said accounting server for performing data input/output operation through channel ports, and a storage device for storing data processed by said storage control device, said accounting method comprising the steps of:

(a) designating accounting subject control

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units;

(b) determining an upper limit value for number of times of access and an upper limit value for a data transfer quantity, said access and data transfer being made by each of said accounting subject control units;

(c) generating accounting data of said accounting subject control units in accordance with said upper limit values; and

(d) recording said accounting data.

13. An accounting method according to Claim 12, wherein said accounting subject control units include host computers, World Wide Names, channel ports, and storage areas in storage devices.

14. An accounting method according to Claim 12, wherein said accounting server is associated with a service processor for controlling and supervising said storage control device.

15. An accounting method according to Claim 12, wherein, in said step (b), said accounting server makes an upper limit values setting request to said storage control device, and in response to said request, said storage control device determines said upper limit values for said number of times of access and said data transfer quantities.

16. An accounting method according to Claim 12, wherein said generation of said accounting data stated in said step (c) is made by said storage control device

in accordance with said upper limit values.

17. An accounting method according to Claim 12, wherein, in said step (d), said accounting server makes an accounting data sending request to said storage control device in every predetermined period, and receives said accounting data in said every predetermined period to record said accounting data in a database of said accounting server.

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